

WE CLAIM

1. A pumping device having a motor arranged in relation to a pumping assembly, the motor having a housing and a shaft extending therefrom for rotating an impeller in the pumping assembly, having a motor seal arranged therein between the shaft and the housing, and having a pump seal arranged between the shaft and the pump assembly, characterized in that

10 the pumping device further comprises a third seal arranged in relation to the shaft for providing additional sealing protection for the motor seal.

15 2. A pumping device according to claim 1, wherein the pumping device further comprises an adapter arranged between the motor housing and the pumping assembly having the third seal arranged thereon.

20 3. A pumping device according to claim 2, wherein the third seal is located on the motor end of the close coupled adapter and is a primary sealing device.

4. A pumping device according to claim 1, wherein the third seal is a labyrinth seal.

5. A pumping device according to claim 1, wherein the
third seal is a magnetic seal.

5 6. A pumping device according to claim 1, wherein the
third seal is a lip seal.

7. A pumping device according to claim 1, wherein the
third seal is a non-contact seal.

10 8. A pumping device according to claim 1, wherein the
pumping device is a close coupled motor/centrifugal pump.

15 9. A pumping device according to claim 1, wherein the
pumping device is a close coupled motor/positive displacement
pump.

10. A pumping device according to claim 1, wherein the
adapter is a close coupled adapter.

11. A pumping device having a motor arranged in
relation to a pumping assembly, the motor having a housing
and a shaft extending therefrom for rotating an impeller in
the pumping assembly, having a motor seal arranged therein
5 between the shaft and the housing, and having a pump seal
arranged between the shaft and the pump assembly,
characterized in that

the pumping device further comprises an adapter
arranged between the motor housing and the pumping assembly
10 having a third seal arranged in relation to the shaft for
providing additional sealing protection for the motor seal.

12. A pumping device according to claim 11, wherein the
third seal is a labyrinth seal.

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13. A pumping device according to claim 11, wherein the
third seal is a magnetic seal.

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14. A pumping device according to claim 11, wherein the
third seal is a lip seal.

15. A pumping device according to claim 11, wherein the
third seal is a non-contact seal.

16. A pumping device according to claim 11, wherein the third seal is located on the motor end of the close coupled adapter and is a primary sealing device.

5 17. A pumping device according to claim 11, wherein the pumping device is a close coupled motor/centrifugal pump.

10 18. A pumping device according to claim 11, wherein the pumping device is a close coupled motor/positive displacement pump.

19. A pumping device according to claim 11, wherein the adapter is a close coupled adapter.